

BEFORE THE ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

11-4-660, Singareni Bhavan, Lakdi ka pool, Red Hills, Hyderabad – 500 004

Submission made by M. Thimma Reddy on behalf of People's Monitoring Group on Electricity Regulation on 22-02-2012

Power requirement projections:

1. There appears to be some discrepancy in estimation of power requirement for the ensuing year for the domestic category. The Form-7 (page 215) related to total revenue at current tariffs as well as Form-12 (page 226) related to total revenue from proposed tariffs mention that 125.33 MU is going to be consumed by the domestic consumers in the slab of 'more than 500 units' per month. At the current tariff income from this category was mentioned as Rs. 78.33 crore. At the proposed tariffs total income from this category was mentioned as Rs. 87.73 crore. But in both these Forms the number of consumers is mentioned as '0' (zero). There may be about 20,888 households in the slab of 'more than 500 units' per month. Total power consumption of these households also needs to be taken in to account while arriving at the total power needs of the domestic consumers.

HVDS Analysis:

2.1 Over the last few years substantial funds were spent in the state in implementing HVDS for agriculture pump-sets. We requested the Commission at the start of this programme and also during its implementation for its critical appraisal. But there was no positive response from the Commission. Newspaper reports indicate that a new HVDS programme involving an investment of Rs. 1,145 crore is going to be grounded from this year. In SPDCL also about 1.77 lakh wells are going to be converted in to HVDS. Before embarking on a new programme there should have been a thorough review of the previous programme. But there appears to be no such exercise. Given the serious implications of this investment (Consumers have to bear this burden in the form of higher cost of service) we place below our analysis of the investment under HVDS.

2.2 For the following analysis we have compared LT – DTR and HVDS. We have taken the transformer capacity as 63 kVA. Hours of supply in a day is assumed as 7 hours and number of days as 240 days. Cost of power is assumed as Rs. 3.00 per unit. We examined this under three power factor capacities – 0.6, 0.7 and 0.8

2.3 The results of our analysis are presented in the following table. In this table reduction in line losses are taken as returns on investing on HVDS.

Power Factor	Cost of HVDS (Rs.)	Cost of Lt – DTR (Rs.)	Additional Cost (Rs.)	Returns per year from HVDS (Rs.)	Payback period (Years)
0.6	6,29,628	1,15,000	5,14,628	18,949	27.16
0.7	6,29,628	1,15,000	5,14,628	13,923	36.96
0.8	6,29,628	1,15,000	5,14,628	10,660	48.28

In Andhra Pradesh a power factors of 0.70/0.80 reflect the prevailing situation. Under these conditions it takes 37 to 48 years to recover the investment made in to the HVDS system, let alone profits over it. In other words the payback period for these investments is about 37 to 48 years. The guaranteed life of these transformers is about 3 years and its life may extend up to 10 years, but its' payback period is several times more. Thus, financially speaking the HVDS does not appear to be attractive. Still the DISCOMs in the state are rushing in to implement it on large scale. And farmers are being coerced in to accepting it.

2.4 One of the important reasons shown in promoting the HVDS system was elimination of unauthorised agriculture connections and theft. Experience in other states like Rajasthan and Uttar Pradesh shows that HVDS is not a deterrent to these practices and even under HVDS system theft continues to take place. We hear that Noida Power Company Limited (NDPL) in UP which went in to HVDS on a large scale is now thinking about winding it up.

2.5 Though the returns from this HVDS scheme are doubtful it will surely end up as a huge burden on the consumers in the form of Cost of Service (COS) as these transformers are four times more costly than the present transformers.

2.6 Based on these facts we request the Commission to review the past implementation of the HVDS in the state and also to put the presently proposed scheme with the support of JIBC to strictest test.

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